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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,617	06/22/2001	Andreas Bulan	Mo-6266/LeA 34,259	7348

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BAYER CHEMICALS CORPORATION
100 BAYER ROAD
PITTSBURGH, PA 15205

EXAMINER

WONG, EDNA

ART UNIT	PAPER NUMBER
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1753

10

DATE MAILED: 04/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/887,617

Applicant(s)

BULAN ET AL.

Examiner

Edna Wong

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 8, 10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 8, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

This is in response to the Amendment dated March 12, 2003. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

Claim Rejections - 35 USC § 112

Claim **4** has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection of claim 4 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicants' amendment. Claim 4 has been cancelled.

Claim Rejections - 35 USC § 102

I. Claims **1 and 7-10** have been rejected under 35 U.S.C. 102(e) as being anticipated by **Heider et al.** (US Patent No. 6,264,818).

The rejection of claims 1 and 7-10 under 35 U.S.C. 102(e) as being anticipated by Heider et al. has been withdrawn in view of Applicants' amendment.

II. Claims **1, 7 and 10** have been rejected under 35 U.S.C. 102(b) as being anticipated by **DE 2,725,211**.

The rejection of claims 1, 7 and 10 under 35 U.S.C. 102(b) as being anticipated

by DE 2,725,211 has been withdrawn in view of Applicants' remarks.

III. Claims **1, 4, 6-8 and 10** have been rejected under 35 U.S.C. 102(b) as being anticipated by **Bulan et al.** (US Patent No. 5,366,597).

With respect to claims 4, 6 and 7, the rejection under 35 U.S.C. 102(b) as being anticipated by Bulan et al. has been withdrawn in view of Applicants' amendment.

Claims 4, 6 and 7 have been cancelled.

With respect to claims 1, 8 and 10, the rejection under 35 U.S.C. 102(b) as being anticipated by Bulan et al. is as applied in the Office Actions dated February 14, 2002 and September 9, 2002 and incorporated herein. The rejection has been maintained for the following reasons:

Applicants' state that at the beginning of the electrochemical fluorination about 2% by weight of the material to be fluorinated is initially introduced into the hydrogen fluoride in order to prevent the formation of detonating fluorine gas at the beginning of the electrochemical fluorination process. This procedure is only carried out in the initiation step. According to the reaction equation of Bulan, as soon as the electrochemical fluorination has been initiated, the material to be fluorinated is metered into the electrolyte. Since, in electrochemical fluorination processes operate over longer periods of time, the products formed cannot be precisely determined, the quantity of material to be fluorinated in the electrolyte either decreases or increases. Bulan simply lacks the details to disclose Applicants' invention.

In response, the claim 1 recites the word "comprising" (claim 1, line 4). The word "comprising" is inclusive and fails to exclude unrecited steps (see *In re Horvitz* 168 F.2d 522, 78 USPQ 79 (CCPA 1948)) such as an initiation step.

Furthermore, once "the starting material to be fluorinated is continuously metered into the cell in the requisite stoichiometry" (Bulan, col. 2, lines 14-17), it appears that this is where the starting material is added continuously and the electrolyte has a quantity of charge that ranges from about 5 Ah per kg of electrolyte to about 600 Ah per kg of electrolyte (Bulan, col. 2, lines 18-41; and cols. 2-4, Examples 1-4), and thus, Bulan meets the limitations recited in the process step of present claim 1, and thus, meets the details of the present claims.

As to electrochemical fluorination processes operating over longer periods of time, the products formed cannot be precisely determined, the quantity of material to be fluorinated in the electrolyte either decreases or increases, the period of time the process operates is not recited in the claims. It is well settled that unpatented claims are given the broadest, most reasonable interpretation and that limitations are not read into the claims without a proper claim basis therefor. *In re Prater* 415 F.2d 1393, 162 USPQ 541 (CCPA 1969); *In re Zeltz* 893 F.2d 319, 13 USPQ 1320.

IV. Claim 11 is rejected under 35 U.S.C. 102(e) as being anticipated by Heider et al. (US Patent No. 6,264,818).

The rejection of claim 11 under 35 U.S.C. 102(e) as being anticipated by Heider

et al. is as applied in the Office Action dated September 9, 2002 and incorporated herein. The rejection has been maintained for the following reasons:

Applicants state that there is nothing in Heider that discloses that the sulfuric acid content or arsenic content can be reduced. In response, there is nothing in the present claim that recites that the sulfuric acid content or arsenic content is reduced. It is well settled that unpatented claims are given the broadest, most reasonable interpretation and that limitations are not read into the claims without a proper claim basis therefor. *In re Prater* 415 F. 2d 1393, 162 USPQ 541 (CCPA 1969); *In re Zeltz* 893 F. 2d 319, 13 USPQ 1320.

V. Claim 11 has been rejected under 35 U.S.C. 102(b) as being anticipated by **DE 2,725,211**.

The rejection of claim 11 under 35 U.S.C. 102(b) as being anticipated by DE 2,725,211 has been withdrawn in view of Applicants' remarks.

VI. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by **Bulan et al.** (US Patent No. 5,366,597).

The rejection of claim 11 under 35 U.S.C. 102(b) as being anticipated by Bulan et al. is as applied in the Office Action dated September 9, 2002 and incorporated herein. The rejection has been maintained for the following reasons:

Applicants state that Bulan does not disclose a process that electrochemically

fluorinates a non-fluorinated or a partially fluorinated organic compound with an electrolyte comprising hydrogen fluoride that has a quantity of charge that ranges from about 5 Ah per kg of electrolyte to about 600 Ah per kg of electrolyte, in which the hydrogen fluoride has a water content of less than about 300 ppm, a sulfuric acid content of less than about 300 ppm, a sulfur dioxide content of less than about 30 ppm and an arsenic content of less than about 30 ppm. In response, the Examiner maintains her position as presented in the Office Action dated September 9, 2002. Applicants' remarks have been fully considered but they are not deemed to be persuasive.

Claim Rejections - 35 USC § 103

I. Claims **2, 5 and 6** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Heider et al.** (US Patent No. 6,264,818) as applied to claims 1 and 7-10 above.

The rejection of claims 2, 5 and 6 under 35 U.S.C. 103(a) as being unpatentable over Heider et al. as applied to claims 1 and 7-10 above has been withdrawn in view of Applicants' amendment.

II. Claims **2, 5-6 and 8-9** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **DE 2,725,211** as applied to claims 1, 7 and 10 above.

The rejection of claims 2, 5-6 and 8-9 under 35 U.S.C. 103(a) as being unpatentable over DE 2,725,211 as applied to claims 1, 7 and 10 above has been

withdrawn in view of Applicants' remarks.

III. Claims **2, 5 and 9** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Bulan et al.** (US Patent No. 5,366,597) as applied to claims 1, 4, 6-8 and 10 above.

With respect to claims 5 and 9, the rejection under 35 U.S.C. 103(a) as being unpatentable over Bulan et al. as applied to claims 1, 4, 6-8 and 10 above has been withdrawn in view of Applicants' amendment. Claims 5 and 9 have been cancelled.

With respect to claim 2, the rejection under 35 U.S.C. 103(a) as being unpatentable over Bulan et al. as applied to claims 1, 4, 6-8 and 10 above is as applied in the Office Action dated February 14, 2002 and September 9, 2002 and incorporated herein. The rejection has been maintained for the following reasons:

Applicants' state that at the beginning of the electrochemical fluorination about 2% by weight of the material to be fluorinated is initially introduced into the hydrogen fluoride in order to prevent the formation of detonating fluorine gas at the beginning of the electrochemical fluorination process. This procedure is only carried out in the initiation step. According to the reaction equation of Bulan, as soon as the electrochemical fluorination has been initiated, the material to be fluorinated is metered into the electrolyte. Since, in electrochemical fluorination processes operate over longer periods of time, the products formed cannot be precisely determined, the quantity of material to be fluorinated in the electrolyte either decreases or increases. Bulan simply

lacks the details to disclose Applicants' invention.

In response, the claim 1 recites the word "comprising" (claim 1, line 4). The word "comprising" is inclusive and fails to exclude unrecited steps (see *In re Horvitz* 168 F.2d 522, 78 USPQ 79 (CCPA 1948)) such as an initiation step.

Furthermore, once "the starting material to be fluorinated is continuously metered into the cell in the requisite stoichiometry" (Bulan, col. 2, lines 14-17), it appears that this is where the starting material is added continuously and the electrolyte has a quantity of charge that ranges from about 5 Ah per kg of electrolyte to about 600 Ah per kg of electrolyte (Bulan, col. 2, lines 18-41; and cols. 2-4, Examples 1-4), and thus, Bulan meets the limitations recited in the process step of present claim 1, and thus, meets the details of the present claims.

As to in electrochemical fluorination processes operate over longer periods of time, the products formed cannot be precisely determined, the quantity of material to be fluorinated in the electrolyte either decreases or increases, the period of time the process operates is not recited in the claims. It is well settled that unpatented claims are given the broadest, most reasonable interpretation and that limitations are not read into the claims without a proper claim basis therefor. *In re Prater* 415 F.2d 1393, 162 USPQ 541 (CCPA 1969); *In re Zeltz* 893 F.2d 319, 13 USPQ 1320.

Furthermore, since claims 5 and 9 have been cancelled, the only limitation remaining under this rejection is claim 2, which recites that the quantity of charged is kept in the ranged from about 50 to about 200 Ah per kg of electrolyte. This is well

within the skill of the artisan because the quantity of charge is a result-effective variable and one skilled in the art has the skill to calculate the quantity of charge that would determine the success of the desired reaction to occur, e.g., perfluorination, absent evidence to the contrary. MPEP § 2141.03 and § 2144.05(b).

As to Bulan simply lacks the details to disclose a process for the continuous preparation of perfluorinated organic compounds comprising electrochemically fluorinating a non-fluorinated or a partially fluorinated organic compound with electrolyte comprising hydrogen fluoride that has a quantity of charge that ranges from about 5 Ah per kg of electrolyte to about 600 Ah per kg of electrolyte.

In response, Applicants' remarks have been fully considered but they are not deemed to be persuasive.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

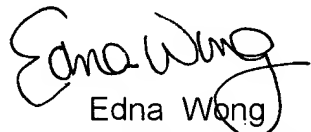
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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edna Wong whose telephone number is (703) 308-3818. The examiner can normally be reached on Mon-Fri 7:30 am to 5:00 pm, alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (703) 308-3322. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 873-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1495.


Edna Wong
Primary Examiner
Art Unit 1753

EW
April 4, 2003